Shocks and risk sharing in the EMU: lessons for banking and capital market union

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Which Channels of Risk Sharing Can Smooth Shocks in the Eurozone? Lessons for Banking and Capital Market Union.

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The divergent fates of the Eurozone economies highlight the need for institutions that can help insure country-specific risk and that, at the same time, are robust to systemic shocks. Capital (i.e., equity and bond) market integration in the Eurozone has remained relatively limited since the inception of the common currency, and European firms tend to more dependent on bank finance than their U.S. counterparts. Therefore, recent policy discussion about risk sharing mechanisms for the EMU (see Buti (2018)) has focused on banking union and fiscal insurance mechanisms. However, fiscal transfers absorb only about 10-15 percent of shocks among the regions of established monetary unions whereas private capital markets absorb about 50 percent of shocks on average (United States has been extensively studied, but similar results hold in other federations—see, e.g., Feld et al. (2018) for Switzerland). Given these magnitudes, and considering the political barriers to anything resembling U.S.-style federalism in the Eurozone, Hoffmann and Sørensen (2012) argue in a VoxEU column that better integration of capital and banking markets is of first order magnitude in the Eurozone. In recent work, we further study the role of banking integration and its relation to capital market integration. Based on this research, this column argues that a deepening banking union is going to accentuate the need for deeper capital market integration—banking union and capital market union are complements, not substitutes.

Using the accounting framework of Asdrubali et al. (1996), the main components of risk sharing are private income smoothing, countercyclical net transfers from the federal government, and procyclical savings behavior. Briefly, the mechanisms are as follows: output of a given country will generate income in other countries if ownership of firms is diversified across countries. As dividends and capital gains accrue to owners across countries, this helps diversify income, making it less volatile, and this type of risk sharing is therefore often labeled income smoothing or "capital market" risk sharing. Further, for given income, countries can isolate consumption from fluctuations by selling or purchasing assets; that is, from countercyclical savings behavior. This helps making consumption less volatile, and this is therefore often labeled consumption smoothing.[1] The role of banking integration in this framework has recently been addressed in several papers by the authors of this column. From this work, we draw three main insights:

1."Deep," not just "interbank," banking integration is needed for better risk sharing and resilience to systemic shocks. The inception of the euro was a catalyst for banking integration, but the nature of this integration was uneven. Hoffmann et al. (2017) argue that the euro created an integrated interbank market, but it did not achieve what we call deep cross-border integration in the banking sector—through direct cross-border lending of banks to the real sector or through cross-border consolidation of banks. Even though there were no formal restrictions for individual banks to move into other markets in the eurozone, in the years prior to the crisis few banks entered retail markets in other member countries and the extent of cross-border lending to the non-bank sector remained very limited. Hoffmann et al. (2017) show empirically, that this focus on interbank banking integration meant that banking integration was quickly reversed during the crisis and that it exacerbated, rather than smoothed, macroeconomic asymmetries among EMU countries after 2008. Countries with high levels of dependence on domestic banks and sectors with many bank-dependent small firms suffered the worst. Hoffmann, Maslov, Sørensen, and Stewen (2018) extend this analysis to look at the channels of risk sharing in the EMU before and after 2008 using a quantitative model that explicitly separates deep and interbank banking integration. Our results, summarized in Figure 1, show that risk sharing was weak during the years after 2008, exactly when it was most urgently needed. We show that consumption smoothing accounts for bulk of this drop in risk sharing. By contrast, income smoothing remained relatively stable (though at a low level). This dry-up in consumption smoothing is strongly associated with a decline in cross-border interbank flows. Direct cross-border banking integration, by contrast, is strongly associated with better income smoothing and held up well during the crisis. These results suggest that only deep banking integration makes risk sharing resilient against systemic shocks.

2. *The situation in the Eurozone today is reminiscent of that of the United States prior to state-level banking deregulation in the 1980s.* As in the eurozone today, the pre-1980 United States had a common interbank market, but little deep interstate banking integration (Hoffmann et al. (2017)). Interestingly, the risk sharing channels and their (lack of) resilience to aggregate shocks resembled what we observe in the eurozone today. Hoffmann and Shcherbakova-Stewen (2011) show that, prior to state-level banking deregulation, interstate risk sharing increased in U.S.-wide booms, but dried up in aggregate recessions—this in particular, due to the procyclical nature of consumption smoothing. This is exactly the pattern that Hoffmann, Maslov, Sørensen, and Stewen (2018) document for the EMU during the crisis.

Banking deregulation in the United States changed this pattern in two important ways. As shown by Demyanyk et al. (2007), deregulation of state-level banking markets led to more income smoothing among U.S. states, consistent with Hoffmann, Maslov, Sørensen, and Stewen (2018) finding direct banking integration to be associated with better income risk sharing in Europe. The increased level of income smoothing in the United States also made risk sharing more resilient to aggregate downturns. Hoffmann and Shcherbakova-Stewen (2011) show that the procyclicality of interstate risk sharing vanished after state-level deregulation. Banking deregulation in the United States is therefore akin to the step towards deep banking integration that is still largely missing in Europe. The Eurozone needs a genuine banking union that will encourage cross-border consolidation of banks and lead to more direct cross-border lending to firms and households.

3. Deep banking integration increases the need for increased capital market integration. Our empirical results for the United States and the EMU suggest that direct cross-border banking integration has risk sharing benefits similar to those of increased cross-border ownership of equity: it leads to more income smoothing and is resilient to persistent asymmetric, as well as common, shocks. This suggests that deep banking integration could substitute for equity market integration; however, Hoffmann, Maslov, Sørensen, and Stewen (2018) demonstrate that deep banking integration and equity market integration are complements, not substitutes. The reason for this is that, as shown by Demyanyk et al. (2007) and Hoffmann and Shcherbakova-Stewen (2011), banking integration improves the access of bank-dependent firms to credit, making it easier for firms to finance investment and wage payments, making labor income and investment less sensitive to asymmetric productivity shocks. However, firm profits become more volatile, which increases the importance of cross-border dividend income flows; i.e., capital market integration.

Our research suggests that capital market union and banking union are complements. If further integration of the eurozone is to be successful, both unions need to be completed. At the same time, the results surveyed here suggest that the risk sharing benefits from banking integration are only robust to large global financial shocks if banking integration is sufficiently deep; i.e., focused on cross-border lending between banks and the real sector (or on cross-border bank consolidation) and not predominantly on cross-border interbank lending. One key precondition for such deep banking integration to be achieved is to decouple banks' fate from the solvency of their regulating sovereign (i.e., to break the "doom loop") through the creation of a common deposit insurance system for the Eurozone and the implementation of the single resolution mechanism with a meaningful fiscal backstop, as, e.g., suggested by the group of 14 French and German economists recently (Bénassy-Quéré et al. (2018)). The creation of Europe-wide credit registries as well as the removal of special national laws favoring public and regional banks in the member states, that *de facto* block entry and cross-border consolidation in many local banking markets are additional measures to be considered.

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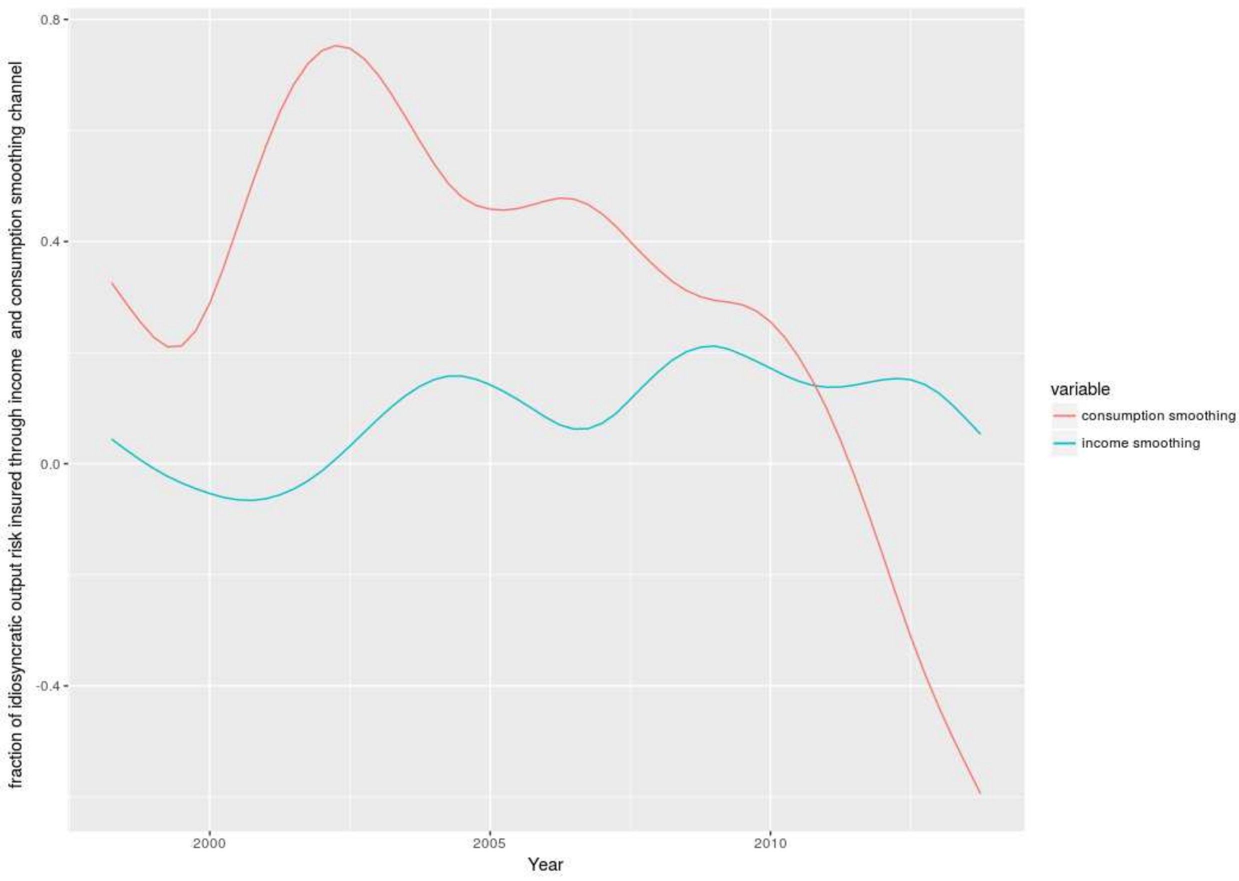
Figure 1: Income and Consumption Smoothing in the Eurozone, 1998-2013



NOTES: The figure plots the degree of income smoothing (green line) and consumption smoothing (red line) for the Eurozone economies from the first quarter of 1996 to the fourth quarter of 2013. Source: Hoffmann et al. (2018).

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